

**— DIN Compatible Miniature Ball Screws —**

KSS started manufacturing Ball Screws more than 50 years ago, since we provide JIS (Japan Industrial Standard) compatible Screws, and furthermore now we are able to provide DIN (Deutsches Institut für Normung, DIN69051-5) compatible Ball Screws. For those items compatible with DIN are shown as Table below.

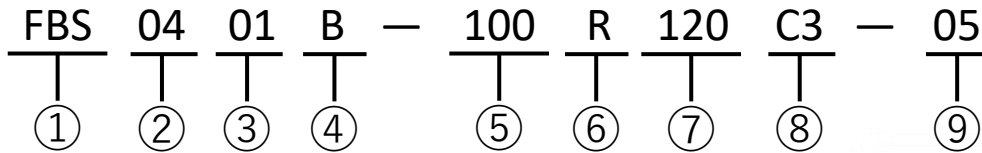
Unit: mm

Lead \ Shaft dia.	1	1.5	2	2.5	3	4	5	6	8	10	12	15	20
6	◎	○	○	○				○		○	○		
8	◎	◎	◎	◎	◎	○	◎		○	○	○		
10	◎	◎	◎	◎	◎	○	○			○		○	○
12	◎		◎	◎	◎	○	○			◎	○*	○*	○*

- : Not exactly compatible with DIN, but available.
- ◎ : Fully compatible with DIN dimension.
- \* : Shaft dia. Is φ13 in these models

For the non-DIN compliant model (○) dimension table, please refer to KSS Master catalogue v10.2. All items are basically customized, and the Model Number Notation are as follows. Please contact KSS whether if there are in stock with short delivery time.

Model Number Notation

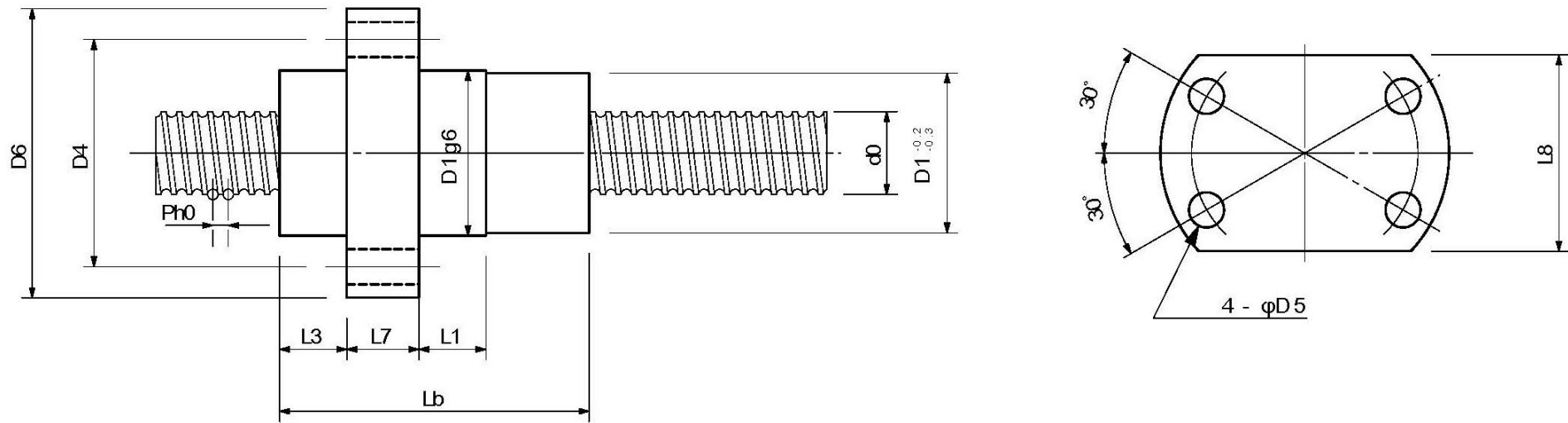


- ① Ball Nut type No.  
 FBS : Precision Ball Screw Single Nut with Flange  
 FKB : Precision Ball Screw Internal Deflector type Single Nut  
 FEB : Precision Ball Screw End Cap type Single Nut  
 FDB : Precision Ball Screw End Deflector type Single Nut
- ② Screw Shaft nominal diameter (mm)
- ③ Lead (mm)
- ④ Re-circulation number (In detail refer to dimension table)
- ⑤ Screw thread length (mm)
- ⑥ Thread direction (R=Right-hand, L=Left-hand)
- ⑦ Screw shaft total length (mm)
- ⑧ Accuracy Grade (C0, C1, C3, C5, C7, C10)
- ⑨ Axial Play (μm)



\*Model Number Notation in the Dimension table are abbreviated, it is different from the full model name which is used for customized item.  
 \*Model name will be indicated in the Drawing.

# DIN Compatible Miniature Ball Screw Dimension Chart



Unit: mm

Ball Nut Model Number	Shaft nominal dia. $d_0$	Lead $Ph_0$	Ball size	BCD	Lead angle	Root dia.	Number of Circuit	Basic Load Rating N		Nut dimension								Ball Nut Model Number	
								Dynamic $C_a$	Static $C_{0a}$	$D_1$	$D_6$	$L_b$	$L_3$ max.	$L_7$ min.	$L_1$	$L_8$	$D_4$		Bolt Hole $D_5$
								FKB 0601 A - DIN	6	1	0.8	6.20	$2^\circ 56'$	5.3	$1 \times 3$	560 / 560	950 / 950		12
FBS 0801 B - DIN	8	1	0.8	8.15	$2^\circ 15'$	7.3	$3.7 \times 1$	780 / 490	1650 / 820	16	28	19	0	6	10	19	22	3.4	FBS 0801 B - DIN
FBS 0801.5 B - DIN	8	1.5	1.0	8.20	$3^\circ 20'$	7.1	$3.7 \times 1$	1100 / 700	2200 / 1100	16	28	21	0	6	10	19	22	3.4	FBS 0801.5 B - DIN
FBS 0802 B - DIN	8	2	1.0	8.20	$4^\circ 26'$	7.1	$3.7 \times 1$	1100 / 700	2200 / 1100	16	28	23	0	6	10	19	22	3.4	FBS 0802 B - DIN
FDB 0802.5 A - DIN	8	2.5	1.5875	8.00	$5^\circ 41'$	6.3	$2.7 \times 1$	1850 / -	3000 / -	16	28	18	0	6	10	19	22	3.4	FDB 0802.5 A - DIN
FBS 0803 B - DIN	8	3	1.0	8.20	$6^\circ 39'$	7.1	$3.7 \times 1$	1070 / -	2150 / -	16	28	25	0	6	10	19	22	3.4	FBS 0803 B - DIN
FEB 0805 A - DIN	8	5	1.5875	8.30	$10^\circ 51'$	6.6	$2.7 \times 2$	3400 / -	6000 / -	16	28	24	7	6	10	19	22	3.4	FEB 0805 A - DIN
FBS 1001 B - DIN	10	1	0.8	10.15	$1^\circ 48'$	9.3	$3.7 \times 1$	840 / 530	2000 / 1000	19	36	19	0	6	10	23	28	4.5	FBS 1001 B - DIN
FBS 1001.5 B - DIN	10	1.5	1.0	10.20	$2^\circ 41'$	9.1	$3.7 \times 1$	1250 / 790	2800 / 1400	19	36	21	0	6	10	23	28	4.5	FBS 1001.5 B - DIN
FKB1002 A - DIN	10	2	1.2	10.30	$3^\circ 32'$	9.0	$1 \times 3$	1450 / 1450	3000 / 3000	19	36	20	0	6	10	23	28	4.5	FKB1002 A - DIN
FKB 1002.5 A - DIN	10	2.5	1.5875	10.40	$4^\circ 23'$	8.7	$1 \times 3$	2100 / 2100	3800 / 3800	19	36	22	0	6	10	23	28	4.5	FKB 1002.5 A - DIN
FKB 1003 A - DIN	10	3	1.5875	10.40	$5^\circ 14'$	8.7	$1 \times 3$	2100 / 2100	3800 / 3800	19	36	23	0	6	10	23	28	4.5	FKB 1003 A - DIN
FBS 1201 B - DIN	12	1	0.8	12.15	$1^\circ 30'$	11.3	$3.7 \times 1$	910 / 570	2400 / 1200	24	40	21	0	8	10	26	32	4.5	FBS 1201 B - DIN
FKB 1202 A - DIN	12	2	1.2	12.30	$2^\circ 58'$	11.0	$1 \times 3$	1600 / 1600	3700 / 3700	24	40	22	0	8	10	26	32	4.5	FKB 1202 A - DIN
FKB 1202.5 A - DIN	12	2.5	1.5875	12.40	$3^\circ 41'$	10.7	$1 \times 3$	2300 / 2300	4700 / 4700	24	40	24	0	8	10	26	32	4.5	FKB 1202.5 A - DIN
FKB 1203 A - DIN	12	3	2.0	12.50	$4^\circ 22'$	10.4	$1 \times 3$	3100 / 3100	5700 / 5700	24	40	34	0	8	10	26	32	4.5	FKB 1203 A - DIN
FEB 1210 A - DIN	12	10	2.381	12.65	$14^\circ 07'$	10.2	$1.7 \times 2$	5100 / -	9800 / -	24	40	30	9.5	8	10	26	32	4.5	FEB 1210 A - DIN

- Note 1) The diameter of one of the Screw Shaft ends must be less than the Screw Shaft Root diameter, otherwise Ball Nut cannot be installed.
- Note 2) Ball Nut dimension is without seal at the both ends.
- Note 3) All models are Right-hand Screw.  
If left-hand Screw is required, please ask KSS representative.
- Note 4) Basic Load Rating for Backlash type and Preload type are described in the same cell.

Basic Load Rating N	
Dynamic $C_a$	Static $C_{0a}$
560 / 560	950 / 950

Preload type  
Backlash type

Dimensions in the above chart are compliant to DIN.

The dimensions in the above chart may vary compared from the "Master Catalogue of KSS Products Vol. 10.2 due to all the above chart dimensions are accordance with DIN.

KSS dimensional series contains not only DIN series but also JIS series exists.  
Please use the Model Number as shown in the table, followed by "-DIN" at inquiry to KSS.